

14 June 2013

Ms. Maritza Montegross NAVFAC MIDLANT (Code OPTE3) **Environmental Restoration** Building Z-144, Room 109 9742 Maryland Avenue Norfolk, VA 23511-3095

RIDEM's Evaluation of the Navy's Responses to Comments

Draft Final Feasibility Study

Site 17, Former Building 32 - Gould Island, NETC

Dear Ms. Montegross,

The Office of Waste Management at the Rhode Island Department of Environmental Management has conducted a review of the Navy's responses to RIDEM's comments on the Draft Final Feasibility Study, dated December 2012 for Former Building 32 - Gould Island (Site 17), Naval Station Newport, located in Newport, RI. As a result of this review, this Office has generated the attached evaluation of responses.

If you have any questions in regards to this letter, please contact me at (401) 222-2797, extension 7020 or by e-mail at pamela.crump@dem.ri.gov.

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Pamela E. Crump, Sanitary Engineer

Office of Waste Management

cc: Matthew DeStefano, DEM OWM Richard Gottlieb, DEM OWM Gary Jablonski, DEM OWM Deb Moore, NSN Kymberlee Keckler, EPA Region I Ken Finkelstein, NOAA Ken Munney, USF&WS Steve Parker, Tetra Tech

RIDEM's Evaluation (6/14/13) of the Navy's Responses (4/30/13) on the Draft Final Feasibility Study (12/31/12) for Site 17 – Former Building 32, Gould Island Naval Station Newport, Newport, RI

Specific Comments:

1. p. ES-7, Executive Summary; Alternative SD3A.

RIDEM suggests changing Alternative SD3A to Alternative 4.

Navy's response:

As discussed on February 28, March 20, 2013, and April 5, 2013, a predesign investigation will be added to the current Alternatives SD2 and SD3A of the FS. Alternative SD3A will become alternative SD3. The previous alternative SD3 will be eliminated. There will be no need for LTM under the new Alternative 3. For clarity:

The revised Alternative SD2 will include:

PDI to determine whether cover is needed in areas at the NE Shoreline Cover areas where PRGs are exceeded as agreed to by the work group Monitoring and LUCs to protect the cover areas.

The revised SD3 will include:

PDI to determine whether dredging is needed in areas at the NE Shoreline Dredging where PRGs are exceeded as agreed to by the work group No monitoring or LUCs.

RIDEM's response:

RIDEM does not recall the Navy suggesting that the PDI would be used for Alternative SD2 to determine if a cover would be required in areas at the NE Shoreline. Due to the sensitive nature of this area, a cover would not be practical due to potential damage of the eel grass beds. RIDEM suggests that based on the results of the PDI investigation, if PRGs exceedances are found, the Navy should dredge the area according to Alternative 3 and restore the eel grass beds to the best extent possible, or continue with long-term monitoring as originally suggested.

4. p. 1-26, Section 1.10.2, Carcinogenic Risks.

Section 1.10.2 was updated to indicate that there is an elevated cancer risk for construction workers due to the presence of cadmium and chromium (as hexavalent chromium, Cr⁺⁶) in shallow soil. Additionally, cadmium and chromium were carried through as COCs for the PRG development process. However, 10⁻⁶ cancer risk level risk-based candidate PRGs were not calculated for cadmium and chromium and justification for not doing so was not provided. Furthermore, chromium in shallow soil is a cancer risk driver and therefore should have a residential and industrial direct contact PRG selected. Please derive PRGs for these COCs or provide justification why PRGs need not be developed. In addition, please update Figures 2-2A and 2-2B accordingly.

Navy's response:

The text of Section 1.10.2 is not clear that the slightly elevated cancer risk to construction workers from surface soil (dust) is 6E-6 (Table 1-2). Since there was no soil risk above the EPA threshold of 1E-4 or HI>1, no risk-based PRGs were developed for soil. This is mentioned in Section 2.2.1.1, but will be clarified in both Sections 1.10 and 2.2.1.1.

RIDEM's response:

Please also clarify that the construction worker cumulative excess lifetime cancer risk of 6E-6 does not exceed the RIDEM threshold of 1E-5.

5. p. 1-28, Section 1.10.4, Human Health Risk Assessment Contaminants of Concern; whole section.

According to the Phase I RI analytical results for surface and subsurface soil, there are multiple locations where concentrations of total petroleum hydrocarbons (TPH) are greater than the Residential DEC of 500 mg/kg. Many of these locations are not comingled with PAHs that would be remediated as a result of being greater than PRGs. In other words, there are concentrations of TPH greater than the Residential DEC of 500 mg/kg that will be left in place because they were excluded from development of PRGs and no individual PAH exceeds its PRG in that location. These sample locations include surface soil samples TP10, SB313, SB318, SB334, SB335, and SB336 and subsurface soil locations TP05, TP06, TP09, TP10A, TP10B, SB306B, SB402, and SB404. As a result, please include in this FS a comparison of existing TPH results as well as confirmatory TPH results to RIDEM DECs/LC for all of these locations and any other areas where petroleum was released.

Navy's response:

In accordance with former dispute resolutions, it was agreed that the locations where TPH and CERCLA constituents are co-mingled would be addressed under the CERCLA actions. TPH that is present but not comingled with CERCLA contaminants that pose risk identified in the risk assessment cannot be addressed in the actions, and therefore should not be cited in the documentation, since TPH is not a contaminant that is addressed under CERCLA. In accordance with the dispute resolution documents 1/12/12 and 4/20/12, actions to address TPH will not be included in the FS report for NETC Site 17.

RIDEM's response:

It should be noted in the FS if concentrations of TPH exceeding RIDEM's ICDEC will remain on site following the CERCLA remedy. If so, please specify these locations in the FS. The Navy will be required to address these locations as Category 2 AOCs under the State program following the CERCLA remedy. If the remaining TPH concentrations across the site are above RIDEM's residential DEC but below the ICDEC, the FS should discuss how the LUCs for the site will address any remaining TPH exceedances of residential criteria.

7. p. 2-3, Section 2.1.4, Identification of Applicable and Relevant and Appropriate Requirements; whole section.

If an area on site exists following the remedial action that contains more than 3 yds of solid waste debris, RI Solid Waste Regulations No. 1 and No. 2 will need to be included as ARARs. Please

update the ARAR tables in this FS if construction debris will remain onsite following the remedial action.

Navy's response:

The Navy acknowledges that there is debris present at the site as a result of former removal actions and building demolition operations. However, this debris is not believed to require action under CERCLA. As an example, the tanks north of Building 32 were closed and demolished in place under RIDEM UST regulations, and as such, the resulting debris should not be removed as part of the Site 17 remedy. The solid waste regulations should not apply as ARARs to all debris present, but only to debris that is contaminated as a result of CERCLA releases. This was discussed on 2/18/13, 3/20/13 and 4/5/13. It was determined that this portion of the solid waste regulations would only apply to debris that contains contaminants addressed under the CERCLA action. It was clarified that they would not apply to shoreline surface debris, such as brick, concrete, or stone. This will be clarified in Section 2.1.4.3 of the report and the appropriate tables. Pam will follow up with statement from her office by 4/12/13.

RIDEM's response:

As indicated in RIDEM's email sent on 4/12/13, the closure report and/or closure certificates for the five concrete underground storage tanks (USTs) on Gould Island are not in RIDEM's UST files. Therefore, the tanks have not been closed out properly under RIDEM's regulations, and further action is required. The existing documentation indicates that the debris remaining in these tanks is not clean, and may be similar to the sump debris proposed to be removed from the Building 32 foundation. Since these tanks are located within the area to be addressed by this remedy, this area must also be addressed as part of the CERCLA action. If the Navy is unable to provide the closure certificates for these tanks, or documentation showing that the tanks contain clean fill only, RIDEM suggests that Navy include an investigation/inspection of the debris contained within the tanks as part of the predesign investigation (PDI) for the Site.

8. p. 2-3, Section 2.1.4, Identification of Applicable and Relevant and Appropriate Requirements; whole section.

RIDEM requested that the Navy include the following sections of RIDEM's Remediation Regulations as ARARs for this Site:

Chemical-specific

3.00 – Definitions, 8.01 – Remedial Objectives, 8.02 – Soil Objectives, 8.03 – Groundwater Objectives, 8.05 – Ecological Protection, 8.06 – Background Concentrations for Soil, 8.07 – Upper Concentration Limits, 8.11 – Remedial Objective Approvals, and 12.0 – Special Requirements for Managing Arsenic in Soil

Action-specific

3.00 - Definitions, 8.08 - Points of Compliance, 8.09 - Institutional Controls, 8.10 - Compliance Sampling, 8.11 - Remedial Objective Approvals, and 11.00 - Remedial Action

The Navy only included Sections 8.02 and 8.03 (with the exception of 8.02A(iv)) in the list of chemical specific ARARs and TBCs, and did not provide an explanation for not including the requested sections of the Remediation Regulations.

RIDEM also requested that the Rules and Regulations for Groundwater Quality, RIDEM, 7/26/10, and the Rhode Island Rules and Regulations for Hazardous Waste Management, Section 8, RIDEM, 6/7/10 be retained as ARARs in this FS.

Please include these sections/regulations as requested, or provide justification for their exclusion from this Feasibility Study. Please note that State Regulations should be considered ARARs and all applicable ARARs should be retained until the remedy is selected in the Proposed Plan.

Navy's response:

In general, the approach to citation of State ARARs in this FS is the same as that used for NUSC which RIDEM found compliant. With regards to the groundwater ARARs, this was discussed on 2/28/13, 3/20/13, and 4/5/13. It was clarified by EPA that because the state of Rhode Island does not have an EPA approved comprehensive groundwater protection program, the State groundwater designations don't apply to the remedy, and the remedy must instead meet federal drinking water criteria for groundwater. It was agreed by all parties that the report will present what the State groundwater designations are for the site, but the same section will also state that they don't apply to the remedy unless they are more stringent than the federal drinking water criteria. Because there are no state groundwater criteria for the COCs at this site that are more stringent than the federal criteria, they do not apply, and the groundwater regulations cited above are not ARARs for this site.

RIDEM's response:

State regulations should be considered ARARs and all applicable ARARs should be retained until the remedy is selected in the Proposed Plan. Alternatively, the Navy should provide justification for exclusion for each of the potential ARARs listed above. Other than the groundwater regulations, the Navy did not explain why the ARARs above should not be included for this Site.

12. p. 2-18, Section 2.4, Estimation of Areas and Volumes, soil; 1st bullet.

Please include TPH as a remedial goal for Area 2 since this area is a former petroleum storage area, located immediately adjacent to five former USTs.

Navy's response:

Please refer to the response to comment 5, above. TPH will need to be addressed separately, since TPH is not a contaminant that is addressed under CERCLA. In accordance with the dispute resolution documents on 1/12/12 and 4/20/12, actions to address TPH will not be included in the FS report for NETC Site 17, although post-remedy sampling can include TPH analysis, and this should be requested at the design steps when the Remedial Action Work Plan is developed.

RIDEM's response:

The dispute resolution dated 4/24/2012 indicates that Navy "commits to sampling for TPH and remediating to applicable RIDEM DECs following State regulations for all Category 1 AOCs within the Tank Farms if warranted by the nature of the site". Since Area 2 is located adjacent to a small tank farm, please include TPH analysis as part of the post-remedy sampling due to the nature of the site. Any exceedances of RIDEM's ICDECs will need to be addressed as part of the proposed remedy.

15. p. 2-18, Section 2.4, Estimation of Areas and Volumes, Soil; 1st and 2nd paragraphs.

This section states that, in the area of SB306B, where building debris is present, 140 cy (in-place volume) of soil will be excavated to approximately 12 ft deep, over an estimated area of 314 square ft. An additional volume of 116 cy of soil mixed with debris will be excavated at SB306B, but would be handled with the debris excavated from the sumps. Please note whether this action will remove all the buried construction debris in this area, or how much will remain onsite.

Navy's response:

Please refer to the response to comment 7, above.

RIDEM's response:

The Navy's response did not address the comment. RIDEM requested information regarding how much buried construction debris will remain onsite after excavation at SB306B. Please provide an estimate of how many cubic yards of debris will remain within the USTs in this area. Also, please see RIDEM's response to comment #7 above.

21. Figures

Although figures depicting exceedances of RIDEM's Residential DEC, Leachability Criteria, and GA Groundwater Criteria were provided in this Draft Final FS, it would be appropriate to include exceedances RIDEM's TPH criteria on these figures, or on a separate figure in this FS, to ensure that all areas exceeding RIDEM's TPH criteria are addressed in the remedial alternatives for soil according to the Dispute Resolution Agreement dated April 24, 2012.

Navy's response:

Please refer to the response to comment 5, above. TPH will need to be addressed separately, since TPH is not a contaminant that is addressed under CERCLA. In accordance with the dispute resolution documents 1/12/12 and 4/20/12, actions to address TPH will not be included in the FS report for NETC Site 17.

RIDEM's response:

Please refer to RIDEM's response to comments #5 and #12. Where TPH is located in areas that will be addressed under CERCLA (i.e., Category 1 AOCs), TPH exceedances should be included on these figures and addressed in the FS. Please note that TPH is commingled with other CERCLA contaminants in areas that are proposed to be addressed in this FS, including SB313 (East Equipment Trench Sump), SB334 (Equipment Trench Sump), SB336 (Hydro Test Tank Sump), TP-06 and TP-10B. Please discuss in this FS that at these locations TPH exceeds ICDECs and will be addressed as part of the CERCLA remedy. Please include all exceedances of RIDEM's ICDECs for TPH on Figures 2-2A and 2-2B.

Also, after reviewing these figures and previous reports to determine where the TPH exceedances occurred compared to the areas that are being addressed, it was difficult to determine where the sample locations are in proximity to the areas to be remediated in Alternatives SO2, SO3 and SO4. Please include all of the sample locations, test pits, etc. on Figures 4-1, 4-2 and 4-3. Further, it appears that surface soil exceedances at TP-01 are not being addressed by the proposed alternatives. Please revise the FS to include TP-01 as an area of concern, or revise Figure 2-2A.